REMARKS/ARGUMENTS

Thorough examination and careful review of the application by the Examiner is noted and appreciated.

The examiner has rejected claims 1-13.

By way of the foregoing amendments, claims 1, 4, 7, 10, and 11 have been amended. Accordingly, upon entry of this Response, Claims 1-13 are pending.

The changes in the claims do not introduce new matter but clarify matters shown and described in the application as filed. The foregoing amendments and following remarks are believed to be fully responsive to the Office Action mailed June 11, 2003 and render all currently pending claims at issue patentably distinct over the references cited by the Examiner. The foregoing amendments are taken in the interest of expediting prosecution and there is no intention of surrendering any range of equivalents to which Applicant would otherwise be entitled in view of the prior art. Reconsideration and examination of this application is respectfully requested in light of the foregoing amendments and the following remarks.

EXAMINER'S OFFICE ACTION

In the June 11, 2003 Office Action referenced above, the Examiner:

rejected Claims 1-13 under 35 USC § 102(b) as being anticipated by Bonora U.S. Patent No. 5,570,990 (hereinafter "BONORA").

Claim Rejections Under 35 USC § 102

Claims 1-13 are rejected under 35 USC § 102(b) as being anticipated by BONORA.

The rejection of claims 1-13 under 35 USC § 102(b) based on BONORA is respectfully traversed.

BONORA teaches a human guided mobile loader stocker (110) for assisting in the transport of standardized mechanical interface (SMIF) containers or pods (18-1, 18-2, 18-4) in a semiconductor manufacturing operation. The mobile loader stocker (110) has a container tracking unit (248) disposed thereon for tracking the containers (18-2, 18-4), the container tracking unit further has a display (258) and a keyboard (260) to communicate commands to and from an intelligent data card. Additionally, BONORA teaches an intelligent data card (232-1) mounted to a side of a container or pod (18-1) having a battery. The pod mates to a processing station (12) which includes means (236) for communicating with the data card (232-1). The communicating means (236) is disclosed as including a photosensitive transistor or other photodetector which responds to data transmitted by light emitting diodes or other communicating means.

The present invention provides an apparatus having

an electronic data card that has "data related to one or more of the manufacturing process and related equipment,

a battery,

an apparatus for measuring capacity of the battery,

an alphanumeric display capable of blanking when not in use,

at least one operator interface button that cooperates to selectively display the data related to one or more of the manufacturing process and related equipment on the alphanumeric display, and wherein the at least one operator interface button is not depressed, the alphanumeric display becomes blank to conserve battery capacity." (Present Application, Amended Claim 1; see also, Applicant's Specification paragraphs 0015-0016, and 0022.) Additionally, the present invention provides an apparatus for visually conveying information directly to a human operator by way of one or more discrete light emitters (Applicant's Specification paragraph 0018). The manner of visually conveying information to the operator is without intervention by the operator and in accord with continuous or intermittent activation states of the light emitter (Applicant's Specification paragraphs 0019-0020).

The June 11, 2002 office action equates the battery condition indicators (204), controlled by motor control logic (200) of the **mobile loader stocker** (110) of the BONORA reference with the apparatus for measuring battery capacity of

the battery associated with the intelligent data card of present invention. As described in the BONORA reference, col. 7, lines 37-55, the battery condition indicators (204) are used to monitor the current state of the battery used to power the **"electronics for the mobile loader stocker"**. However, the BONORA reference fails to extend the use of such battery condition indicators for the battery associated with the intelligent data card (232-1). Applicant has amended independent claims 1, 7, and 11 to further distinguish the present invention over the apparatus and methods disclosed in BONORA. Additionally, the battery capacity measuring limitations disclosed in claims 4 and 10 have been incorporated into independent claims 1 and 7, respectively.

Unlike the present invention, the BONORA reference fails to provide any means for conserving battery capacity of the battery associated with the intelligent data card (232-1).

Additionally, the display (258) of the BONORA reference is disposed on the mobile loader stocker (110) **NOT** on the intelligent data card (232-1). Furthermore, the display (258) of the BONORA reference is accessed via use of the keyboard (260) which is also disposed on the mobile loader stocker (110) and **NOT** on the BONORA intelligent data card (232-10.

Unlike the BONORA reference, the present invention provides both the alphanumeric display (35) and the operator interface buttons (31, 33) to selectively display data on the alphanumeric display on the data card (40), not on a separate apparatus such as a processing station. Additionally, the alphanumeric display goes blank when the operator interface buttons are not blank to conserve battery capacity of the battery associated with the data card (40). Additionally, the present further provides an apparatus, such as a timer expiration (see Applicant's Specification paragraph 0020), to

measure battery capacity of the battery associated with the data card (40).

On page 3, clause 2, the Office Action equated the communicating means (236) including a photodetector which responds to data transmitted by light emitting diodes with the light emitter disposed on the data card of the present invention. See BONORA, col. 8, lines 38-46. As discussed on page 5 of Applicant's response dated April 16, 2003 to the January 16, 2003 Office Action, "Bonora is clearly concerned with optocoupling of data card information to another piece of production processing equipment. . . Nowhere does Bonora disclose that the LED(s) disclosed in Bonora are for any information conveyance directly to a human operator nor does it suggest any such use or adaptaion." The LEDs used in BONORA are used for serial communication of data from one piece of equipment to another and require use of a photodetector to receive signals from an LED. Clearly, the LEDs in the BONORA reference are not used to visually communicate to a human operator without the use of an intermediary photodetector device.

Unlike the BONORA reference, the intelligent data card described in US Patent No. 5,155,884 (hereinafter "'884") as disclosed in Applicant's Specification paragraph 0016 does have a display and keyboard mounted to the data card. However, an operator must use the keyboard to communicate with the display. Unlike the '884 reference, the present invention requires only one button to access the data card display, thus providing for a much more compact design than the display/keyboard design of the '884 reference. The '884 reference also fails to disclose a battery capacity measuring apparatus or a method to conserve battery capacity. Also like the LEDs used in the BONORA reference, the LEDs disclosed in

the '884 reference are used for serial or digital communications with another piece of equipment and are not used to visually communicate with a human operator.

Clearly, the apparatus and methods disclosed in both the BONORA and the '884 references do not anticipate the claimed invention. Thus, the BONOROA and the '884 references fail to disclose, teach, or suggest an apparatus of the present invention for visually communicating information to a human operator having an electronic data card having a battery measuring capability, and an alphanumeric display disposed on the electronic data card that goes blank when not in use to preserve battery capacity.

Based on the above, it is respectfully submitted that the amended claims 1, 7, and 11 are in condition for allowance, which allowance is earnestly solicited. With respect to the remaining claims, all of which depend from one of claims 1, 7, and 11, the fact that they claim additional elements or limitations also renders them allowable over BONORA and '884, which allowance is earnestly solicited.

It is believed that the present invention as amended is novel over the reference relied upon by the Examiner.

The rejection of claims 1-13 under 35 USC § 102(b) based on anticipation is respectfully traversed. A reconsideration for allowance of these claims is respectfully requested of the Examiner.

Based on the foregoing, the Applicant respectfully submits that all of the pending claims, i.e. claims 1-13 are now in condition for allowance. Such favorable action by the Examiner at an early date is respectfully solicited.

If for some reason Applicant has not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent

the abandonment of this application, please consider this as a request for an extension for the required time period and/or authorization to charge our Deposit Account No. 50-0484 for any fee which may be due.

In the event that the present invention is not in a condition for allowance for any other reasons, the Examiner is respectfully invited to call the Applicant's representative at his Bloomfield Hills, Michigan office at (248) 540-4040 such that necessary action may be taken to place the application in a condition for allowance.

Respectfully submitted,
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